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EXAMINER

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 08/470,571  
Filing Date: June 06, 1995  
Appellant(s): HARVEY ET AL.

\_\_\_\_\_  
Mr. Joseph M. Guiliano  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 5/1/2006 appealing from the Office action mailed 4/28/2004.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The following are the related appeals, interferences, and judicial proceedings known to the examiner which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal:

A) The examiner is aware of the many related cases cited by the appellant in the Brief, but is unaware of a specific one that would directly affect the Boards decision.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

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**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct. However, the examiner notes the following:

A) The examiner notes that all of the rejections made under sections 102 and 103 apply videotext "prior art" against the claims. In applying this "prior art," the examiner has taken the position that the "locally generated" image and "user specific" data terminology of the claims, given the broadest reasonable interpretations, fails to distinguish that which is claimed over teletext prior art. The applicant disagrees. As such, this issue is a key issue with respect to all of the rejection made under section 102 and 103.

The examiner believes that this terminology issue is best understood when considering the rejection of claim 187 over the 1976 publication by Crowther et al entitled, "Teletext

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Receiver LSI Data Acquisition and control." As such, the order of the rejections as set forth in the instant Answer has been shuffled with respect to the order that they appeared in the Final Office action in order to have the noted terminology issues decided first; i.e., given the potential impact that this decision may have has on all of the rejections made under section 102 and 103. References are provided within the rejections of the present Answer identifying their source in the Final Office action; and

B) That all section 103 rejections that were based on the "CBS/CCETT North American Broadcast Teletext Specification (Extended Antiope)" dated May of 1981, have been withdrawn because, as argued by the appellant, the examiner has been unable to verify/establish a publication date for said document.

#### **(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

US #2,754,226	Zworykin	7/1956
US #4,218,698	Bart et al.	8/1980
US #4,253,157	Kirschner et al.	2/1981
US #4,290,062	Marti et al.	9/1981
US #4,694,490	Harvey et al.	9/1987
GB # 959,274	Germany	5/1964
DE #2,356,969	Diederich	5/1975
GB #1,370,535	Millar et al.	10/1974
GB #1,556,366	Betts	11/1979
JP #55-028691	Oono et al.	2/1980
GB #1,405,141	Yoshino et al.	9/1974

Guillermin, J. "Development & Applications of the Antiope-Didon Technology", 1980.

Chambers "CEEFAQ-The Generation, Distribution and Transmission of a National Teletext Service", 1/1976.

Crowther et al. "Teletext Receiver LSI Data Acquisition and Control", 1/1976.

Hedger et al. "Telesoftware-Value Added Teletext" IEEE, 1980, Pages 555-566.

Sedman E.C. "The Use of MicroCobol for Telesoftware," 3/1980

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**Tunmann et al., Microprocessor For CATV Systems," 27<sup>th</sup> Annual NCTA Convention, 1978.**

**Young et al, "The Automation of Small Television Station", Journal of the SMPTE, 10/1971.**

**For the convenience of the Board, copies of the cited non-US Patent documents are provided with the Answer.**

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**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the  
appealed claims:



## **I. THE CLAIMED INVENTION, TELETEXT, AND THE ISSUES:**

1) The 1976 publication by Crowther et al, entitled "Teletext Receiver LSI Data Acquisition and control," is highlighted for its showing of "common" teletext decoder structure and operation. Specifically, as discussed with respect to Figures 1 and 2, the publication evidences these decoders as comprising:

a) RF and IF tuning circuitry for providing an incoming video signal containing discrete lines/packets of teletext data embedded therein [Note: the first 4 lines of the third paragraph of page 9/1; and the last three lines on page 9/1];

b) Video processing circuitry for converting the incoming signal, and the data embedded therein, into a "clean" digital waveform [SEE the last paragraph on page 9/1];

c) A user input device for inputting various forms of user specified commands including user specified requests for desired "pages" of teletext data [Note the keyboard of figure 2];

d) Control circuitry that includes a storage element for storing the various forms of user specified commands including the user's "page" requests [Note: the "Requested Page And Control Data Storage" block of figure 2: the last 17 lines on page 9/2];

e) "Data Acquisition" circuitry which compares input data from each of the received lines/packet of data to the stored request data to determine if the discrete line/packet being received is "part of the page that was requested by the user and, if so, to cause memory write circuitry to be activated by providing data from the line/packet and appropriate address signals to a data "MEMORY" [Note the first paragraph on page 9/3];

f) Said "MEMORY" for storing, under control of the acquisition circuitry, the data from each of the received lines/packets which is part of the requested page thereby, over time, "organizing" the received discrete data "parts" into a full page format; and

g) Display circuitry, comprising a character generator, for receiving the "organized" data stored in the memory and for, under control of various control signals, "locally generating" an image corresponding to "page" that was requested by the user.

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Additionally, the Crowther et al publication explicitly identifies additional features of said decoders including:

1. Circuitry for allowing the decoder to receive and display data from other source including "viewdata" [i.e. videotext that is transmitted using a modem and the phone line];
2. Circuitry for allowing the "locally generated" teletext images to be superimposed over the video portion of the received TV programming (e.g., subtitles) [Note the third paragraph on page 9/2]; and
3. Circuitry for locking/"coordinating" the local generation of the teletext image to the timing of the TV signal; i.e. a feature that is noted to be "essential" when overlaying teletext images onto the video of the TV [Note the first three lines of the third paragraph on page 9/2].

**2) Claim 187, which is representative of claim limitations currently before the Office, reads as follows:**

A method of outputting a video presentation at a receiver station, said method comprising the steps of:

receiving at least one information transmission at said receiver station, said at least one information transmission including a first discrete signal and a second discrete signal;

detecting said first discrete signal and said second discrete signal;

passing said first discrete signal and said second discrete signal to at least one processor;

organizing information included in said at least one first discrete signal with information included in said second discrete signal to provide an organized signal at said receiver station;

generating an image by processing at least one user specific subscriber datum, said at least one specific subscriber datum being stored at said receiver station prior to the step of organizing and based on information supplied by a user of said receiver station;

outputting said video presentation to said user based on said organized signal, said video presentation comprising, firstly, a video image and, secondly, a coordinated display using said generated image and said video image.

**3) The examiner continues to believe that such claim limitations read on the "common" teletext decoder structure discussed in part "1)" above as follows:**

- a) The preamble, **"A method of outputting a video presentation at a receiver station,"** reads on a teletext decoder operating in cooperation with its associated TV set, to provide a video presentation comprised of TV video and locally generated teletext images.
- b) The receiving step, **"receiving at least one information transmission at said receiver station, said at least one information transmission including a first discrete signal and a second discrete signal,"** reads on the received TV signal that contains discrete line/packets of teletext data.
- c) The detecting step, **"detecting said first discrete signal and said second discrete signal,"** reads on the decoder's video processing circuitry and portions of the acquisition circuitry (e.g. the "shift register") which function to detect and separate each line/packet of teletext data from the video signal;
- d) The passing step, **"passing said first discrete signal and said second discrete signal to at least one processor,"** read on the passing of the received teletext data to the decoder's acquisition circuit (or other parts thereof) and/or to the decoders control circuitry for various processing;
- e) The organizing step, **"organizing information included in said at least one first discrete signal with information included in said second discrete signal to provide an organized signal at said receiver station,"** reads on the process of writing a first discrete line/packet of data into the memory along "with" a second subsequent line/packet of teletext data thereby "organizing" the data from a plurality of lines/packets into the requested "page" of data;
- f) The step of generating, **"generating an image by processing at least one user specific subscriber datum, said at least one specific subscriber datum being stored at said receiver station prior to the step of organizing and based on information supplied by a user of said receiver station,"** reads on the of locally generating a teletext image by processing the "user specific" request/command data inputted via the input device and stored in the control circuitry, prior to the receipt and organizing of the pluralities of discrete line/packet data that make up the "parts" of the page requested thereby (i.e. the user must input his/her page request, and it must be stored and processed by the control circuitry, before the decoder to knows which lines/packets of data need to be detected and organized into the requested page).
- g) The step of outputting, **"outputting said video presentation to said user based on said organized signal, said video presentation comprising, firstly, a video image and, secondly, a coordinated display using said generated image and said video image,"** reads on the decoders ability to selectively superimpose teletext images (e.g., subtitles, newflashes, etc,...) over video images of the TV programming in a synchronized/ "coordinated" fashion recognized to be "essential" to the image overlay process.

**4) Given the above, the following is noted:**

- a) The examiner recognizes the fact that the images of applicants' disclosed invention are "locally generated" in a manner that is different from the way in which teletext images are "locally generated." Such differences, however, are not recited in the current claims.
- b) The examiner recognizes the fact that the data of applicants' disclosed invention are "user specific" for reasons that are different from the way in which the user inputs of a teletext decoder are "user specific." Such differences, however, are not recited in the current claims.

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c) The examiner recognizes the fact that the discrete signals of applicants' disclosed invention are "organized" in a manner that is different from the way in which teletext images are "organized." Such differences, however, are not recited in the current claims.

## **II. Conventional Teletext:**

**The examiner maintains that:**

a) One of ordinary skill in the art would have understood the fact that all of the major world teletext standards transmit each page of teletext data by breaking the page down into pieces and placing the pieces within respective ones of a plurality of discrete line/packet signals. This is required because each horizontal line period of the video signal into which a respective line/packet is embedded has a bandwidth limited by the bandwidth of the TV signal. Each line interval is simply incapable of carrying an entire page of data.

b) That, given the packetized transmission scheme that is used by the major world teletext standards, the receiver side of the systems required a decoder that provided, as addressed above:

1) Some form of video processing circuitry for separating the lines/packets from the video signal;

2) Some form of data acquisition circuitry for recognizing when one of a line/packet has been received which contains data therein corresponding to a piece of the page that is desired/requested and for extracting said piece therefrom;

3) Some form of memory which allows the extracted pieces of teletext to be assembled and "organized" back into a complete page of data; and

4) Some form of character generator that enables a respective teletext image to be "locally generated" from the complete page of data that has been captured.

**Throughout the present prosecution applicant has characterized the examiner's position as an "opinion." The examiner disagrees noting that substantial effort has been made to support such discussions with evidence.**

**[NOTE: "Section C" of the Final Office action mailed 4/28/2004; Part II above; etc,...]**

### **III. SECTION 112 ISSUES:**

**R1)** Claims 56, 80, 84 and all claims dependent thereon (i.e. 57, 58, 60-63, 65-74, 81, 85, 87, 89-91, and 183-186) are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

#### **A. With respect to claims 56, 80, and 84 (and all claims dependent thereon):**

1) Throughout the prosecution history, applicant alleges that teletext images are not "locally generated" images, and relies on this allegation to support his position that the "locally generated" recitations of the claim avoid the teletext prior art. This position was reiterated by applicant's response of January 9, 2003 in S.N. 08/470,571:

**"Applicants have consistently argued that a locally generated image is different from a ... teletext image that is generated wholly by processing an incoming signal received from a remote source"  
[lines 8-10 on page 83]**

Applicant's allegation, however, is clearly refuted by the prior art of record which shows that those of ordinary skill in the art understood teletext images to be "locally generated" by the decoder on the receiving side of the systems. This is because the teletext "pages" that are carried within teletext transmissions represent respective sets of codes instructions each of which is capable of telling a decoder how to "locally generate" a respective teletext image: e.g.,

***"[Videotex] data transmitted do not represent directly the picture which is generated in the receiver, but encoded instructions to the receiving decoder"***

[Lines 8-10 under the heading "1-Scope" on the first page of the article "The Concept of a Universal 'Teletext' (Broadcast and Interactive Videotex) Decoder, Microprocessor Based]

"The [teletext] receiving equipment can be conventionally thought of as consisting of three sections: a) signal acquisition, b) memory, c) **display generation**. The signal is acquired and suitably processed before being loaded into memory. Memory is repeatedly accessed by the display generation section **to obtain the instructions** which direct it

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to **create the images of alphanumeric and graphic characters and place them on the screen**" (emphasis added)

[The first paragraph under the heading "Receiving Equipment Options" on page 539 of the 1980 article "THE ROLE OF THE TELEVISION RECEIVER MANUFACTURERE IN THE UNITED STATES" by Ciciora et al.]

"It must be clearly held in mind that the [teletext] image displayed on the CRT **is synthetic video and that the synthesis is done locally**" (emphasis added)

[The first two lines under the heading "Synthetic Video" on page 545 of the 1980 article "THE ROLE OF THE TELEVISION RECEIVER MANUFACTURERE IN THE UNITED STATES" by Ciciora et al.]

"In a picture display device for displaying a mixed picture signal which signal comprises a conventionally received television picture signal and **a locally generated signal, such as a teletext sub-title...**"

[The first 6 lines in the abstract of GB 2,062,401 patent document to Korver]

"Indeed, contrary to video captioning that 'manufactures' the characters on the editing location, **the digital captioning produces texts at the user locations in their own decoders.**"

[SEE: The last two lines on page 5 and the first line on page 6 of the PTO provided translation of the 11/1980 publication to Sachet et al. entitled, "Captioning of Television Transmissions by the ANTIOPE System."]

"Picture display devices of such type, have a picture screen on which a mixed picture signal can be displayed are known. By means thereof pictures can be displayed in which **locally generated** characters, drawing elements and similar items can be superimposed on a normal picture, for example a moving picture transmitted, for example, by a transmitter and received in a conventional manner. **Such a signal can be generated by, for example, a teletext decoder in the display device**" (emphasis added)

[The first paragraph under the heading "Background of the Invention" in column 1 of US Patent #4,347,532 to Korver]

"A normal TV set is not enough for the reception of videotex magazines. A TV set can receive outside signals and transform them into display, **but for videotex it needs special devices for data reception, decoding and picture generation.** The ANTIOPE decoder comprises this additional equipment. When it is connected to an ordinary TV set, the combination becomes and ANTIOPE terminal." (emphasis added)

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[SEE: The discussion in the "Receiving equipment" section of 1979 document entitled, "ANTIOPE VIDEOTEX SYSTEMS").

Throughout the prosecution history, applicant never addressed this evidence and instead continued deny that teletext images were "locally generated" by the decoder. However, on page 24 of the Brief, applicant now attempts to provide his own evidence to disprove the evidence cited above. Specifically, applicant cites a passage from US Patent #4,885,775 to Lucus which states:

In teletext systems known in the prior art, no significant modifications are made to the transmitted pages prior to their display on the screen other than, perhaps, the addition of a page number in a fixed position on certain pages. In particular, **conventional teletext systems do not provide for addition of locally generated information by the receiver** which might change the meaning or interpretation of the transmitted information.

It is noted, however, that Lucus is not refuting the fact that teletext images are "locally generated" images. Rather Lucus is pointing to the fact that the actual **information** content of "locally generated" teletext images is determined, substantially, from the transmitted sets of "instructions" that tell the decoders how to "locally generated" said images. That is, it is the "information content" of the locally generated images that is not changed by the decoder. Significantly, neither applicant's current arguments, nor the "locally generated" limitations of the instant amended claims, are directed to the locally generated information content of the recited "locally generated" images.

The "problem" is that applicant continues to argue that the "locally generated" image terminology of the claims distinguishes that which is claimed over applied teletext prior art because, so it is argued, "teletext images are not locally generated images." This position is in direct conflict with the accepted meaning of the "locally generated" terminology being that, as evidenced above by art of record, those of ordinary skill in the art explicitly understood teletext images to be "locally generated" images. It is for this reason that the examiner believes that the recited "locally generated" terminology has become a section 112-2 issue. Specifically, the meaning of the terminology has become unclear given the record that supports it.

#### Additional Arguments:

1) It is noted that in line 17 on page 14 of the Brief, applicant argues that the term "locally generated" should be read to mean: "brought into existence at a particular location." Even if accepted this definition does not support applicant position that teletext images are not "locally generated" images because teletext



images are "brought into existence" on the receiving side of the network - a fact clearly understood by those of ordinary skill at the time of applicant's alleged invention as evidenced above and specifically addressed throughout prosecution.

2) In lines 16-19 on page 16 of the Brief, applicant states that they have made a diligent effort, throughout the prosecution, to specifically set forth the "local content aspect" of their invention within their pending claims; e.g., over an extended prosecution history during which applicant submitted close to 200 claims and numerous amendments thereof. The examiner does not understand why applicant's efforts did not result in amended claims having positive recitations of this "local content aspect" of the invention. It is also not understood why applicant has refused to acknowledge that teletext images are indeed "locally generated" images when the prior art of record shows that they are; i.e. such acknowledgement might have allowed applicant to address the issue head-on and provide amendments/clarification necessary to overcome the applied teletext prior art; clarifications/amendments needed to define the "local generation" of the invention over the "local generation" that unquestionably occurs within the teletext prior art.

3) On page 17, applicant suggests that the examiner refuses to give meaning to the "locally generated" terminology because the examiner has referred to it as a "label". This position is refuted by the fact that the examiner has devoted so much time and effort to addressing the "locally generated" limitation and to addressing applicant's arguments pertaining thereto as submitted throughout the record. It is applicant who elected simply to dismiss the examiner's position. The fact is that throughout the extensive prosecution, applicant has had ample opportunity to clarify the recited terminology of the pending claims to clarify over the teletext prior art. Applicant chose not to amend the claims to provide clarification, and instead has elected to hang his hat, with respect to this issue, on the erroneous position that, "teletext images are not locally generated images." They are indeed.

The examiner again notes that the "locally generated" terminology is a label in the sense that it only indicates that the recited "image" is, in some unspecified way, *locally generated*. This label, however, is not the same as a limitation that positively recites a step/circuit for locally generating in a specified way. Instead of amending the claims to positively recite such a step/circuit to distinguish the claims over the teletext prior art, applicant has persistently maintained the position that, "teletext images are not locally generated;" i.e. choosing to ignore the clear evidence that the examiner provided showing and explaining why teletext images were in fact locally generated ones.

Now, in the Brief, applicant seems to take the position that the "broadest reasonable interpretation" standard used by the Office should be suspended to

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allow limitations to be read into the "locally generated" terminology for, allegedly, the sake of "consistency." The examiner disagrees noting that applicant has had plenty of opportunity to amend the claims to include such clarifications and chose not to do so; i.e., the issue was raised long ago in the record and has been maintained and argued throughout the prosecution history (it should be no surprise).

Further, the examiner notes that applicant's arguments themselves continue to inject applicant's own views and interpretations of the recited terminology into the record which is a clear indication, i.e. an "admission", that applicant himself desires broader interpretations of the terminology than have been afforded to him by the court in related litigation. That is, the record offers no clear definition to be adopted for the sake of "consistency" as alleged.

.....

#### **B. With respect to claim 84 :**

Claim 84 is a method claim that positively recites five steps that are performed at a transmitter station in order to:

- a) Receive a video signal, a first discrete signal, and second discrete signal;
- b) To transfer these received signals to a transmitter; and
- c) To transmit these transferred signals to at least one receiver station.

Included within the recitations of claim 84 (e.g. lines 10-18) are functional descriptions of processing that is "intended" to occur at the receiver station when the transmitted signals are received thereat. However, steps for performing this "intended" receiver side processing are never positively recited by the claim.

Thus, claim 84 is confusing and indefinite because it is not clear whether the functional descriptions of lines 10-18 are part of the recited method or whether they should be treated merely as descriptions of intended use. Clarification is required.

**C. With respect to claim 80:**

Claim 80 is a method claim that positively recites two transmitting steps that are performed at an intermediate transmitter station. However, the recitations of claim 84 (like those of claim 80) include functional descriptions of processing that is "intended" to occur at the receiver stations based on the data that is transmitted by the two positively recited transmission steps.

Thus, claim 80 is also confusing and indefinite because it is not clear whether the noted functional descriptions are part of the recited method or whether they should be treated merely as descriptions of intended use. Clarification is required.

#### **IV. Other Claim Terminology (noted):**

**A)** Throughout the claims, applicants recite processing steps in which information from a first discrete signal is organized "**with**" information from a second discrete signal (e.g. lines 3 and 4 of **claim 65**, lines 10-12 of **claim 84**, lines 10-12 of **claim 93**, lines 10-12 of **claim 187**). The recitations in question are very broad and clearly fail to specify:

- a) Whether the term "with" refers to a process in which the information from the second discrete signal is used to organize the information from the first discrete signal; or
- b) Whether the term "with" refers to a process in which the information from the first discrete signal and the information from the second discrete signal are merely organized together: i.e. as respective components of a larger "organized" structure (e.g. such as respective teletext packets that are "organized," by a teletext receiver, into a larger teletext page).

With respect to the rejections of the claims that follow, the latter interpretation of this recitation adopted and addressed. However, for the record, the examiner notes that either of the above interpretations can be met by processing that necessarily occurred within conventional teletext decoders. For example:

- a) In conventional teletext, the pages of teletext data were transmitted as a plurality of data packets wherein each packet comprised a first discrete data signal portion and a second discrete header signal portion. At the decoder, the information from the discrete header signal portion of the packet was used to "organize" the information from the discrete data signal portion of the packet [e.g. information from the header portion of the packet synchronized the byte clock of the decoder thereby allowing the serial bits stream of the information from the data signal portion to be properly "organized" into x-bit parallel data bytes/words]; and
- b) In conventional teletext, most pages of teletext data were transmitted as a plurality of data packets. To recover the information that was needed to display a given one of the transmitted pages, page information from the respective plurality of transmitted packets had to be extracted and "organized" together to provide the complete set of display instructions that was needed to generate the displayable image.

[again, see section "c" of the Final Office action mailed 4/28/2004]

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**B)** With respect to the "interpretation" of the terminologies discussed in section 3 of the Brief, i.e. to the extent that further comment is needed, reference is made to the latest Advisory action.

## **V. Other Items (noted):**

1) In the fourth paragraph on page 12 of the Brief, applicant complains that during the course of the present prosecution, each of his many responses resulted in the application of new prior art and/or new rejections. What applicant fails to state is that that each of applicant's responses effected wholesale changes in the claims necessitating the new art and/or new rejections. That is, rather than narrowing the claims with each successive amendment to overcome the applied prior art, applicant chose to respond to the rejections by redrafting the claims and presenting new sets of limitations directed to different sets of features of the disclosed invention.

2) With respect to paragraph 5 on page 12 of the Brief, the examiner notes that it was applicant who first introduced blanket statements into the record alleging section 120 priority for that which is claimed. Originally applicant used this allegation as justification for citations to the 44 page 1981 parent specification, rather than the 557 page of the instant 1987 CIP specification, when addressing section 112-1 rejections. Applicant's citations to the 1981 specification were challenged due to the fact that the 1987 CIP specification failed to incorporate the 1981 specification therein. This challenge led into the issue of whether or not applicant was entitled to section 120 priority even before intervening prior art was applied; i.e., an issue that cuts across many of applicant's 328 bulk filed applications.

Initially, the instant examiner's intent was simply to explain why applicant's blanket claims to section 120 priority were not being accepted out of hand. Applicant responded, and the issue has continued to be debated throughout prosecution. From this debate, it is not only clear that applicant and the examiner have very different understandings of what is required to establish section 120 priority, but it is clear what those differences actually are. The examiner views this result as significant being that the 120 priority issue, as noted above, cuts across so many of the pending applications.

In any event, as recognized by applicant and the examiner, the section 120 issue is moot with respect to the present Appeal given the fact that that no intervening prior art is currently applied against the claims.

3) In lines 17 and 18 on page 17 of the Brief, applicant argues that the examiner refuses to give meaning to the term "user specific." Like the "locally generated" terminology discussed above, such arguments are refuted by the fact that the examiner has devoted so much time and effort to this Issue. Again, the examiner position concerning this disputed terminology, as well as the others set forth in part 3 of the Brief, are addressed in the latest Advisory action.

However, in summary, the examiner maintains that the data inputted at the receiving station by a user to identify the page of teletext data that he/she desires, i.e. the data representing the specific page request of a specific user, is "user specific data" given the broadest reasonable interpretation of the terminology. With respect to the broadest reasonable interpretation, it is again noted that applicant's own arguments continue to

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equate "user specific" with "receiver specific" [e.g., page 20 of the Brief]. This evidences that applicant is reading the terminology broadly too; i.e. wherein, according to applicant, the term "user" is synonymous with the term "receiver".

Again, like the term "locally generated" addressed above, the examiner maintains that the term "user specific" is a label in the sense that it only indicated that the "data" of the "user specific data" recitation is, ***in some unspecified way***, "user specific" (i.e. or, according to applicant, "receiver specific"). The examiner certainly does not rely on this "label" characterization itself to dismiss the terminology and reject the claims as is now suggested by the applicant [e.g. page 22 of the Brief].

With respect to the arguments which begin in line 14 on page 22 of the Brief, the examiner takes the position that the act of specifying a selection via the entry of data into a system by a user, makes the data entered by the user "user specific" data because, if for nothing else, the entered data relates/pertains to the specific user that entered it (note the definition submitted by applicant on page 19 of the Brief).

4) Applicant's position set forth on page 17 of the request is noted, however, the claims recite "locally generated images" and not "images having locally generated information content" as seems to be argued.

Further, it is noted that Teletext images are not only "locally generated" images but are locally generated to have a "locally generated display content;" i.e. each decoder has the ability to present the information content to the user in a different manner (i.e. color of the background/foreground, size of characters, fonts used, etc,...). This issue is raised to further show the inadequacy of the "locally generated" recitations in distinguishing that which is claimed over the teletext prior art.

5) As note above and throughout prosecution, conventional teletext systems necessarily transmitted pages of data as pieces given the limited bandwidth of the TV signals that conveyed the teletext transmissions and, as such, these pieces were necessarily "organized" back into a complete page format by the decoders. The examiner maintains that the "organize" recitations of the claims do nothing to avoid the teletext prior art [e.g. pages 26-28 of the Brief].

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## **VI. SECTION 103 ISSUES:**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).



**R2) Claims 187, 195, and 196 are rejected under 35 U.S.C. 103(a) as being unpatentable over figure 2 of the 1976 article "TELETEXT RECEIVER LSI DATA ACQUISITION AND CONTROL" by Crowther et al. in view of Bart et al. [U.S. #4,218,698].**

(i.e. corresponding to paragraph E-18 of the Final Office action)

**I. The showing of Crowther et al. article:**

The Crowther article discloses a conventional teletext decoder which comprises:

- 1) An antenna (not shown in figure 2) **for receiving** an information transmission comprised of a TV signal and a plurality of discrete teletext packet signal embedded within the VBI of the TV signal [i.e. the illustrated "Video Input"];
- 2) A slicing circuit ("DATA SLICER") **for detecting** and separating the discrete teletext packet signal from the TV signal;
- 3) A transmission line (@ "D") **for passing** the detected discrete teletext packet signals to at least one processor (the illustrated "DATA ACQUISITION" circuitry);
- 4) A RAM ("MEMORY") **for organizing** coded data obtained from a plurality of the passed discrete teletext packet signals (e.g. first, second, third, etc,...) into a "page" of data;
- 5) A user input device ("KEYBOARD") **for supplying** information by a user of the receiver station (i.e. the user keys in the information), wherein the supplied information is used to generate at least one user specific subscriber datum, e.g. a user selected teletext page number, **which must be stored and processed** by the processor (@ "CONTROL CTS.") before ("**prior to**") the coded data can be organized into a page of data [i.e. the page must be selected by the user before the data corresponding to said selected page can be received and organized];
- 6) Circuitry (e.g. the illustrated "SIGNAL ACQUISITION", "MEMORY", and "DISPLAY" circuitry) **for generating** a teletext image by processing the stored user specific subscriber datum that is "based on" the information entered by the user via input device; and
- 7) Display circuitry (not shown in figure 2) for outputting a presentation comprised of the teletext image (from the "OUTPUT BUFFERS").

**II. Differences:**

The claims differ from the showing of the cited publication only in that figure 2 of the cited article illustrate how the locally generated teletext image (from the "OUTPUT BUFFERS") was displayed.

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**III. Obviousness:**

1) It was notoriously well known in the television display art to have provided switching circuitry within the TV receiving/display devices so as to offer/enable three different display modes:

1) A **video display mode** in which the received TV video image is displayed alone;

2) A **text mode** in which the locally produced teletext image is displayed alone; and

3) A **mixed mode** in which the display of the locally generated teletext image is coordinated with the display of the video image to produce a combined image

The "prior art" of Bart et al. has been cited as exemplifying this notoriously well known feature [e.g. see lines 12-55 in column 1]<sup>1</sup>

The noted "mixed mode" was known to have been both a desirable and advantageous feature in the TV display art in that it allowed the user to view received text data (e.g. teletext pages) while viewing/displaying TV programming, thereby ensuring that the user does not miss content of the TV programming during the display of text.

It would have been obvious to one of ordinary skill in the art to configure the to have configured the display device in figure 2 of the cited Crowther et al. article to provide the three notoriously well known display modes that were discussed in Bart et al. thereby enabling the Crowther et al. receiver to operate, advantageously, in the mixed display mode.

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**Arguments:**

1) Note section I. of this Answer:

2) Note that Bart merely describes the circuitry needed to selectively overlay teletext images onto the video images in the "essential" synchronized/coordinated fashion described within Crowther itself [note lines 1-3 of the third paragraph on page 9/2]. Further, Bart itself explicitly recognized that the overlay circuitry system described therein was to be used, advantageously, with teletext decoders [e.g. lines 12-25 of column 1].

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<sup>1</sup> Teachings of this feature can be found throughout the art of record [Note: lines 29-44 on page 2 of GB #1,486,424 to Turner; JP 54-154215 to Yokoyama; Switch 5 in figure 5 of JP #55-028691 to Oono et al.; Switch 3 in figure 4 of U.S. Patent #3,961,137 to Hutt et al.; etc,...]

**R3) Claims 188-191, 193, and 194 are rejected under 35 U.S.C. 103(a) as being unpatentable over figure 2 of the 1976 article "TELETEXT RECEIVER LSI DATA ACQUISITION AND CONTROL" by Crowther et al. in view of Bart et al. [U.S. #4,218,698] for the same reasons that were set forth for claim 187 above. The following is noted:**

(i.e. corresponding to paragraph E-24 of the Final Office action)

**1) With respect to claims 188 and 189:**

As is described in the first paragraph under the heading "Data Acquisition" on page 9/3 of the Crowther et al. article, a *receiver specific write control activation control signal* is *generated* based on a "third" discrete signal component of the received teletext data which identifies the page number of the data being received. This activation signal controls the "MEMORY" of figure 2 among other things.

**2) With respect to claim 190:**

It is noted that the page number itself only represents "partial information" of the identifier for each row of coded data that is to be captured and organized within the memory; i.e. each captured row is identified by row identifying addresses too.

**3) With respect to claims 191:**

The examiner notes that the control circuitry in the Crowther et al. system of figure 2 ("CONTROL CCTS.") the user specific datum must be received before it is can be passed to the memory contained therein for storage thereat.

**4) With respect to claims 193 and 194:**

The examiner notes a receiver specific datum (i.e. the user inputted and stored teletext page number) is processed according to a third discrete signal of the teletext data (i.e. it is compared to the received page numbers) and is used to generate the activation signals which ultimately (e.g. "in response" thereto) causes the local generation, output, and display of the teletext image. [note the discussion with respect to claims 188 and 189 above].

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**R4) Claims 93, 107, and 108 are rejected under 35 U.S.C. 103(a) as being unpatentable over figure 2 of the 1976 article "TELETEXT RECEIVER LSI DATA ACQUISITION AND CONTROL" by Crowther et al. in view of Bart et al. [U.S. #4,218,698] for the same reasons that were set forth for claim 187 above.**

(i.e. corresponding to paragraph E-30 of the Final Office action)

Arguments:

With respect to the "outputting" recitation it is noted that the Crowther et al publication explicitly identifies the additional features of said decoders as including:

1. Circuitry for allowing the "locally generated" teletext images to be superimposed over the video portion of the received TV programming (e.g., subtitles) [Note the third paragraph on page 9/2]; and
2. Circuitry for locking/"coordinating" the local generation of the teletext image to the timing of the TV signal; i.e. a feature that is noted to be "essential" when overlaying teletext images onto the video of the TV [Note the first three lines of the third paragraph on page 9/2].

This results in, over time, a presentation that comprises only video images when subtitles are not displayed and the "essential" **coordinated** image when the locally generated subtitles are overlaid and presented.

**R5) Claims 94, 95, 98, 100, 103, and 106 are rejected under 35 U.S.C. 103(a) as being unpatentable over figure 2 of the 1976 article "TELETEXT RECEIVER LSI DATA ACQUISITION AND CONTROL" by Crowther et al. in view of Bart et al. [U.S. #4,218,698] for the same reasons that were set forth for claim 93 above.**

(i.e. corresponding to paragraph E-31 of the Final Office action)

SEE the discussion set forth above with respect to corresponding claims 188-191, 193, and 194 for a complete explanation.

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**R6) Claims 187, 195, and 196 are rejected under 35 U.S.C. 103(a) as being unpatentable over Betts [GB 1,556,366] in view of Bart et al. [U.S. #4,218,698].**

(i.e. corresponding to paragraph E-17 of the Final Office action)

**I. The showing of Betts:**

As is shown in figure 1, Betts discloses a conventional computer controlled teletext decoder which comprises:

- 1) TV receiving circuitry (7,2) **for receiving** an information transmission comprised of a TV signal and a plurality of discrete teletext packet signal embedded within the VBI of the TV signal;
- 2) A slicing circuit (8) **for detecting** and separating the discrete teletext packet signal from the TV signal;
- 3) Circuitry (11) **for passing** the detected discrete teletext packet signals to at least one processor (13);
- 4) A RAM (15) **for organizing** coded data obtained from a plurality of the passed discrete teletext packet signals (e.g. first, second, third, etc,...) into a "page" of data;
- 5) A user input device (21) **for supplying** information by a user of the receiver station (i.e. the user keys in the information), wherein the supplied information is used to generate at least one user specific subscriber datum, e.g. a user selected teletext page number, **which must be stored and processed** by the processor (13) before ("**prior to**") the coded data can be organized into a page of data [i.e. the page must be selected by the user before the data corresponding to said selected page can be received and organized];
- 6) Circuitry (@ 13;15, 18, 19,20) **for generating** a teletext image by processing the stored user specific subscriber datum that is "based on" the information entered by the user via input device (21); and
- 7) Display circuitry (1), including a switch (3), for producing a presentation comprised of a video image (from element 2) and the teletext image (from element 20).

**II. Differences:**

The claims differ from the showing of Betts only in that Betts does not explicitly described the operation of switch (3) as operating to provide a "mixed mode" operation in which the display of the teletext image from element "20" **is coordinated** with the display of the video image from element "7" to produce a combined image presentation.

**III. Obviousness:**

1) It was notoriously well known in the television display art to have provided switching circuitry within the TV receiving/display devices so as to offer/enable three different display modes:

- 1) A **video display mode** in which the received TV video image is displayed alone;
- 2) A **text mode** in which the locally produced teletext image is displayed alone; and
- 3) A **mixed mode** in which the display of the locally generated teletext image is coordinated with the display of the video image to produce a combined image

The "prior art" of Bart et al. has been cited as exemplifying this notoriously well known feature (e.g. see lines 12-55 in column 1)<sup>2</sup>, and as evidencing the fact that the "mixed mode" was known to have been both a desirable and advantageous feature in the TV display art in that it allowed the user to view received text data (e.g. teletext pages) while viewing/displaying TV programming, thereby ensuring that the user does not miss content of the TV programming during the display of text [note lines 12-37 in column 1 of Bart].

It would have been obvious to one of ordinary skill in the art to configure the switch (3) in Betts to provide the three notoriously well known display modes that were discussed in Bart et al. thereby enabling the Betts receiver to operate, advantageously, in the mixed display mode as taught by Bart et al. [note lines 18-20 of Bart].

**R7) Claims 188-191, 193, and 194 are rejected under 35 U.S.C. 103(a) as being unpatentable over Betts [GB 1,556,366] in view of Bart et al. [U.S. #4,218,698] for the same reasons that were set forth for claim 187 above, in view of the 1976 article "TELETEXT RECEIVER LSI DATA ACQUISITION AND CONTROL" by Crowther et al. The following is noted:**

(i.e. corresponding to paragraph E-25 of the Final Office action)

The processor (13) in Betts performed the functions of a convention teletext decoder and, implicitly, provides for all of the operations that were provided by data acquisition circuitry of Crowther et al.; i.e. being that the processor (13) of Betts simply represents a software implementation of such conventional dedicated circuitry [note lines 46-54 on page 1 of Betts]. Being such, it is maintained that claims 188-191, 193, and 194 are met

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<sup>2</sup> Teachings of this same display feature can be found throughout the videotex art of record [Note: lines 29-44 on page 2 of GB #1,486,424 to Turner; JP 54-154215 to Yokoyama; Switch 5 in figure 5 of JP #55-028691 to Oono et al.; Switch 3 in figure 4 of U.S. Patent #3,961,137 to Hutt et al.; etc,...]

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at least for the same reasons that were addressed above in paragraph R3 paragraph of this office action.

**R8) Claims 192 and 197 are rejected under 35 U.S.C. 103(a) as being unpatentable over Betts [GB 1,556,366] in view of Bart et al. [U.S. #4,218,698] for the reasons set forth for claim 187 above, in view of Oono et al. [JP 55-028691].**

(i.e. corresponding to paragraph E-26 of the Final Office action)

Claims 192 and 197 differ from the computer driven teletext decoder of the modified system of Betts et al. only in that the modified system of Betts et al. was a one-way teletext system and, therefor, did not comprise a return link for sending requests to a remote transmission site. However, as noted in Betts et al., a key advantage of its software implementation was its ability to be easily re-programmed to provide expanded/different receiver functions [e.g. lines 70-73 of page 1]. The ability to receive viewdata over the phone line, in addition to TV broadcast, being a feature that was often added to teletext decoders;<sup>3</sup>

Oono et al. also describes a software driven videotex decoder, wherein the configuration of the software driven decoder that was described by Oono et al. corresponded in many obvious ways to the configuration of the Betts et al. decoder [e.g. as can be seen by comparing the structure shown in figure 3 of Oono et al. to the structure shown in figure 1 of Betts et al.]. In the case of Oono et al., however, the decoder had been programmed to interact with the remote videotex database over a telephone line thereby, advantageously, adopting an *optimized* "hybrid" teletext/viewdata implementation [see paragraph R27 of this Office action].

Given the above, the examiner maintains that it would have been obvious to one of ordinary skill in the art to have utilized the noted programming/re-programming feature of the modified Betts et al. system to advantageously added the software needed for providing the *optimized* "hybrid" videotex implementation as shown in Oono et al.; such an optimized implementation being both advantageous and desirable given its more efficient use of the available VBI bandwidth.

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<sup>3</sup> Note that the "additional features" described in the Crowther publication included Viewdata (Section "1)" of Part "I." of this Office action).

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**R9) Claims 93, 107, and 108 are rejected under 35 U.S.C. 103(a) as being unpatentable over Betts [GB 1,556,366] in view of Bart et al. [U.S. #4,218,698] for the same reason that was set forth for claim 187 above.**  
(i.e. corresponding to paragraph E-27 of the Final Office action)

Arguments:

With respect to the "outputting" recitation it is noted that the Betts explicitly identifies the additional features of said decoders as including:

1. Circuitry for allowing the "locally generated" teletext images to be superimposed over the video portion of the received TV programming (e.g., subtitles) [Note lines 43-47 on page 2]; and
2. Circuitry for locking/"coordinating" the local generation of the teletext image to the timing of the TV signal; i.e. a feature that was known to be "essential" when overlaying teletext images onto the video of the TV [Note elements 4 and 5 of figure 1].

This results in, over time, a presentation that comprises only video images when teletext images are not displayed and the "essential" **coordinated** image when the locally generated teletext images are overlaid/boxed on the video and presented.

**R10) Claims 94, 95, 98, 100, 103, and 106 are rejected under 35 U.S.C. 103(a) as being unpatentable over Betts [GB 1,556,366] in view of Bart et al. [U.S. #4,218,698] for the same reason that was set forth for claim 93 above.**  
(i.e. corresponding to paragraph E-28 of the Final Office action)

SEE the discussion set forth above with respect to corresponding claims 188-191, 193, and 194 for a complete explanation.

**R11) Claims 102 and 109 are rejected under 35 U.S.C. 103(a) as being unpatentable over Betts [GB 1,556,366] in view of Bart et al. [U.S. #4,218,698] for the reasons set forth for claim 93 above, further in view of Oono et al. [JP 55-028691].**  
(i.e. corresponding to paragraph E-29 of the Final Office action)

SEE the discussion set forth above with respect to corresponding claims 192 and 197 for a complete explanation.



**R12) Claim 56 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kirschner et al. [US Patent #4,253,157] in view of Bart et al. [US Patent #4,218,698].**

(i.e. corresponding to paragraph E-15 of the Final Office action)

1) As is shown in figure 1, Kirschner et al. is illustrative of a conventional viewdata-type system which enables interactive video terminals (e.g. @ 10a-10n) to have controlled access to data within at least one remote database (e.g. @ 20) by contacting the remote database via an intermediate telephone system (e.g. @ 18). Each of the interactive terminals in Kirschner et al., e.g. shown in figure 2, represents a "video apparatus" that operates:

a) To **receive**, during one or more initialization processes, "user specific data" that is stored within the memory (@ 44 and/or 46) of at least one of a plurality of possible user/receiver specific application modules.

[NOTE: lines 55-62 of column 2; lines 11-15 of column 4; lines 35-39 of column 4; and lines 4-36 of column 7];

b) To **contact** a remote data source (20) wherein the remote data source is contacted after the initialization process in which said "user specific data" was received.

[NOTE lines 32-68 of column 7 and lines 1-12 of column 8]

c) To **receive** from the remote data source, as a result of said contact, remotely originated data representative of a specific "closed loop file".

[NOTE lines 38-60 of column 8]

d) To **execute** processing instructions to process said remotely originated data and said user specific data at the terminal location in order to locally generate a text/graphics image for output to television receiver (12). That is, by executing local software, each terminal locally processes the remotely originated data that is being received, along with the locally stored user specific data, in order to select and store that portion of the remotely originated data that is needed to locally generate the text/graphics image output.

[NOTE: lines 61-68 of column 8; and lines 5-12 of column 9].

2) Claim 56 differs from the showing of Kirschner et al. only in that the television receivers (12) in Kirschner et al. was not explicitly described as having operated,

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or at least been operable, to have displayed the locally generated text/graphics image over conventionally received TV signal broadcasts.<sup>4</sup>

3) Bart et al. has been cited because as evidencing the fact that it was well known in the art to have configured conventional TV receivers so as to have operated in a plurality of user selectable display modes; i.e.

a) A television display mode in which received TV broadcast video is displayed alone;

b) A text/graphics display mode in which locally generated text/graphic images are displayed alone; and

c) A mixed display mode in which the locally generated text/graphic images and the received TV broadcast video are displayed simultaneously by overlaying the text/graphic images on top of the TV video.

[NOTE: lines 12-18 of column 1].

The "mixed display mode" was a known and desirable capability in the videotext display art because it enabled the user to access videotext data while watching conventional TV programming thereby ensuring that the user would not miss TV programming of interest (e.g. important news stories) while receiving and displaying videotex data.<sup>5</sup>

4) In view of the above, the examiner maintains that it would have been obvious to one of ordinary skill in the art to have implemented the TV receivers (12) in Kirschner et al. so as to have the conventional multi-display configuration described in Bart et al.; thereby enabling the receivers to be operated in the described "mixed" display mode. Such a modification was advantageous in that it prevented the users from missing TV programming of interest when accessing the data from the remote database (@ 20).

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<sup>4</sup> Claim 56 only requires that the two signals be displayed "simultaneously" (i.e. it does not require the content of the two signals to be related in any way).

<sup>5</sup> Applicants have alleged that this notoriously well known "mixed" display mode of the prior art pertains only to the display of broadcasted teletext data and not to the display of telephone supplied Viewdata [e.g. note lines 4-23 on page 105 of the response filed 1/9/2003 in 08/470,571]. The examiner maintains that applicants' position is erroneous and attempts to establish an unrealistically low level of skill in the videotex art for reasons that are fully addressed in paragraph "C-5" of this Office action.

**R13) Claims 57, 58, 60-63, 65-74, and 89-91 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kirschner et al. [US Patent #4,253,157] in view of Bart et al. [US Patent #4,218,698] for the same reasons that were set forth for claim 56 above. The following is noted:**

(i.e. corresponding to paragraph E-16 of the Final Office action)

1) With respect to the limitations of claim 57, it is noted that the terminal described in Kirschner et al. was in fact programmed to perform each of the recited steps.

2) With respect to the limitations of claim 58, 70, 71, and 74, it is noted that the recited "instruction signal" limitations read on signaling that was provided from keyboard (41) in figure 2 of Kirschner et al. as the result of the user's inputs/selections.

3) With respect to the limitations of claim 60 and 61, it is noted that the terminal described in Kirschner et al. processed many "identifiers" (e.g. data segment identifiers, the terminal identifier, subscription identifiers, etc,...).

4) With respect to the limitations of claim 62, it is noted that the terminal described in Kirschner et al. processed many "identifiers" at least one of which includes a "communications resource identifier" that was provided to the terminal from the remote data source (e.g. lines 5-25 of column 7).

5) With respect to the limitations of claim 63, it is noted that the phone line in Kirschner et al. obviously, if not inherently, acts as a digital information channel (e.g. lines 24-28 of column 4).

6) With respect to the limitations of claims 65 and 66, it is noted that various discrete computer subroutines (i.e. digital signals) are "organized" together under the control of the terminal's computer/processor in order to create the computer program (i.e. the organized signal) that runs the terminal's computer/processor (e.g. lines 36-43 in column 4 of Kirschner et al.). Additionally, the various types of data that are being processed by the so programmed "computer" in each terminal also comprise various forms of organized discrete signaling (e.g. figures 3-6 of Kirschner et al.).

7) Throughout the present prosecution applicant has alleged that the term "television programming" covers all forms of television information. Given such a broad interpretation, the described optional storing of the data from the remote data source in Kirschner et al., e.g. for later access and display, meets the limitations of claims 67, 68, and 70 (note lines 38-45 of column 9).

8) It is noted that the neither the applied prior art of Kirschner et al. nor the applied prior art of Bart et al. indicates that the conventional TV signal being received and displayed comprised a video signaling that had been transmitted in encrypted format. However, the examiner notes that it was notoriously well known in the art for the video signal that was displayed by a conventional receiver to have been provided to the receiver an encrypted format. Specifically, CATV, pay-TV, and satellite TV providers commonly encrypted the TV programming that was provided to their subscribers in order to prevent unauthorized use and/or interception. The examiner maintains that it would have been obvious to one of ordinary skill in the art for the video signal that was received by the modified system of the applied prior art to have been received from such as a conventional CATV, pay-TV, and satellite TV service provider.

9) With respect to claim 89 and 90, it is noted that whenever teletext/captioning is overlaid onto a video image in the "mixed mode" it only replaces part of the video image;

10) With respect to claim 91, it is noted that the audio portion of TV programming often "explains" the action that is taking place in the video portion [i.e. news stories for example]. Obviously, the locally generated captioning pertaining to the audio portion of the programming would be displayed simultaneously with the audio with which it is related (i.e. being that the ability to synchronize different levels of captioning with the same audio component of the TV program is the reason why Mode II captioning was provided in the first place).

**R14) Claim 84 is rejected under 35 U.S.C. 103(a) as being unpatentable over Millar et al. [GB #1,370,535] in view of Marti et al. [US #4,290,062].**

(i.e. corresponding to paragraph E-19 of the Final Office action)

**I. Preface:**

It is noted that claim 84 is a method claim that:

- a) Positively recites five steps that are performed at a transmitter station; and
- b) Includes (@ lines 10-18) a functional description as to how the transmitted discrete signals are "intended" to be processed at at least one receiver station.

[see part "B" of paragraph "R1" of this Office action]

**II. As to the five steps that are positively recited in claim 84:**

Millar et al. has been cited as exemplifying a conventional teletext transmission system structure which, as represented in the figures, comprised:

- a) A transmitter station (figure 1); and
- b) A plurality of receiving stations (figures 2 and 3).

As illustrated, the transmitter station of figure 1 included:

- a) The illustrated adder (@ "+") **for receiving**, e.g. from a video signal source (not illustrated), a video signal input (@ "VIDEO");
- b) The illustrated adder (@ "+") **for delivering** the received video signal (@ VIDEO) to a transmitter (not shown);
- c) The illustrated adder (@ "+") **for receiving**, e.g. from a teletext service source (@ "52"), pluralities of discrete teletext packet signals representing "pages" of teletext data (@ "SYNCHRONOUS DATA");
- d) The illustrated adder (@ "+") **for delivering** the received discrete teletext packet signals (@ "SYNCHRONOUS DATA") to said transmitter (not shown); and

d) Said transmitter (not shown) **for transmitting** a combined signal (@ "VIDEO + DATA") provided by said adder (@ "+") to ones of the receiver stations of figures 2 and 3, wherein the combines signal comprises the received video signal (@ "VIDEO") and the received pluralities of teletext packet signals.

### **III. As to the functional descriptions of claim 84:**

Figure 3 of Millar et al. provides a broad illustration of conventional teletext receiver structure. Figures 1 and 7 of Marti et al., quite obviously, provide a more detailed illustration of the same conventional teletext receiver structure. That is:

a) Figure 3 of Millar et al. broadly illustrates a block labeled "PAGE SELECTOR" (58) for providing a page selection process (i.e. as does figure 1 of Marti et al. @ 17), however the more detailed showing of figure 7 of Marti et al. evidences that this page selection process included:

1) A "step" in which the user inputs/**supplies** information into an input device (@ 19) for identifying the desired teletext page to be received; and

2) A "step" in which this **supplied information was used as the basis** for generating (@ 19) digital code representing the user's selected page number (i.e. "**user specific information**");

3) A "step" in which said digital code (i.e. said "user specific information") is held/**stored** in memory (@ 57);

4) A "step" in which the stored digital code (i.e. said "user specific information") was utilized (e.g. @ 56) to detect the reception of those discrete teletext packet signals which carry information pertaining to the desired teletext page;

b) Figure 3 of Millar et al. broadly illustrates a block labeled "PAGE STORE" (59) into which information from a first ones of the received discrete teletext data packets of the selected page is "**organized with**" information from subsequently received discrete teletext data packets of the selected page to obtain an entire "page" of information; and

c) Figure 3 of Millar et al. broadly illustrates a block labeled "CHARACTER GENERATOR" (56) which receives the "**organized information**" read from page store and is "instructed" thereby to assemble displayable picture data, i.e. that is derived from a ROM located therein, so as to

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locally generate/synthesize a user specific teletext image corresponding to the user selected teletext page;  
wherein, as was notoriously well known in the art <sup>6</sup>, the so locally generated/synthesized teletext image was displayed either "*in coordination with*" the video signal (i.e. superimposed as an overlay over the video) or without coordination with said video signal (i.e. alone) [e.g. note lines 9-16 on page 1 of Millar et al.].

Arguments:

It is the examiner's position that the "steps" that are positively recited by claim 84 are met by the conventional teletext transmission system shown by Millar et al. alone, whereas the functional descriptions of the receiver side processing are obvious, if not implicit, in the conventional receiver side circuitry that is broadly disclosed/illustrated by Millar et al., as is evident via the more detailed showing of such conventional structure offered by Marti et al.

**R15) Claims 85, 87, 183-186, are rejected under 35 U.S.C. 103(a) as being unpatentable over Millar et al. [GB #1,370,535] in view of Marti et al. [US #4,290,062] for the same reason that was explained for claim 84 above. The following is also noted:**

(i.e. corresponding to paragraph E-20 of the Final Office action)

1) With respect to claim 85, it is noted that all of the discrete signal of Millar et al. were embedded in the VBI of the video signal;

2) With respect to claim 87, the examiner maintains that it would have been obvious for the video signal in Millar et al. to have been a conventional subscription TV signal therefore requiring encryption as was notoriously well known in the art at the time of applicant's alleged invention;<sup>7</sup>

3) With respect to claim 183, it is noted that various discrete control signals are necessarily received and organized by a computer @ 52 of figure 1 in Millar et al. in order to generate the control signal needed to organize and transmit the packets of the teletext pages in proper order and at proper times [e.g. note lines 23-65 of page 3].

4) With respect to claim 184 and 185, it is again noted that teletext data inherently represent instructions for locally generating and outputting corresponding teletext images at the receiver locations.

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<sup>6</sup> Note paragraph "C-5" of the Final Office action.

<sup>7</sup> e.g. US Patent #2,757,226 to Zworykin.

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**R16) Claim 187, 191, 195 and 196 are rejected under 35 U.S.C. 103(a) as being unpatentable over Millar et al. [GB #1,370,535] in view of Marti et al. [US #4,290,062] for the same reason that was explained for claim 84 above. The following is noted:**

(i.e. corresponding to paragraph E-21 of the Final Office action)

- 1) The recitations of claims 187 and 191 are met by the receiver side circuitry/processing of the applied prior art for the same reasons that were discussed with respect to claims 84 above.

**R17) Claims 188-190, 193 and 194 are rejected under 35 U.S.C. 103(a) as being unpatentable over Millar et al. [GB #1,370,535] in view of Marti et al. [US #4,290,062] for the same reason that was explained for claim 187 above.**

(i.e. corresponding to paragraph E-22 of the Final Office action)

- 1) With respect to claims 188-190, 193 and 194, it is noted that:

- a) As evidenced in figure 7 of Marti et al., a receiver specific control signal is generated and stored from a "third" one of the discrete packet signal and serves (via comparator 56) as a basis for selecting the teletext page that is to be displayed; or alternatively

- b) as evidenced in figure 7 of Marti et al., a receiver specific control signal is generated and stored from a "third" discrete signal (i.e., user inputs at 19) and serves (via comparator 57) as a basis for selecting the teletext page that is to be displayed;

wherein, in either case, the receiver specific page number data represents only partial address information;



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**R18) Claims 80 and 81 are rejected under 35 U.S.C. 103(a) as being unpatentable over Millar et al. [GB #1,370,535] in view of Marti et al. [US #4,290,062] for the same reason that was explained for claim 84 above. The following is also noted:**

(i.e. corresponding to paragraph E-23 of the Final Office action)

- 1) Note section "III" of paragraph "R-14" of this Office action; and
- 2) Note that Millar et al. itself explicitly recognized the fact that the embedded teletext information could also be used to convey information from an originating "station" location to intermediate "station" locations and for superimposing routing information onto the video signal at the intermediate location for "effecting automatic executive action relating to the signal routing and monitoring" [e.g. lines 36-47 of page 1].

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**R19) Claim 80 is rejected under 35 U.S.C. 103(a) as being unpatentable over Diederich (DE 2,356,966) and Germany (GB 959,274), in view of the article "CEEFAX – The Generation, Distribution and Transmission of a National Teletext Service" by Chambers.**

(i.e. corresponding to paragraph E-32 of the Final Office action)

**I. What is claimed:**<sup>8</sup>

Claim 80 appears to be directed to a method involving a TV distribution network that is comprised of:

- 1) An originating transmitter;
- 2) A remote intermediate transmitter; and
- 3) A plurality of receiver stations;

Wherein, according to the recited method, said originating transmitter:

- 1) Transmits a signal to the intermediate transmitter which transmitted signal comprises:

- a) Video; and
- b) An instruct signal;

Wherein said instruct signal of the transmitted signal, when relayed by the intermediate transmitter to ones of the receiver stations, causes at least one of the receiver stations to generate and/or output a "locally generated" portion of a video presentation that is displayed at the receiver "in coordination" with the video; and

- 2) Also transmits a control signal to said intermediate transmitter which controls the intermediate station to communicate said transmitted signal (i.e. at least to communicate the video and instruct signal contained therein) to said receiver stations.

**II. The Showing of Diederich and Germany:**

It was notoriously well known in the art for conventional TV distribution networks to have comprised:

- 1) A national/network/central TV station (i.e. corresponding to the recited "originating transmitter") for generating and transmitting national/network/central TV programming;

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<sup>8</sup> Note part "C" in paragraph "R2" of this Office action

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2) One or more local/regional TV stations (i.e. corresponding to the recited **"remote intermediate transmitter"**) each of which:

- a) Receives the national/network/central TV transmission from the national/network/central TV station;
- b) Generates its own regional/local TV programming and advertisements; and
- c) Then:
  - 1. Re-transmits portions of the received national/network/central TV programming to TV **"receivers"** located within local regional/local service area during national/network/central programming time slots; and
  - 2. Transmits its own locally generated regional/local TV programming to said **"receivers"**, i.e. in place of the received national/network/central TV programming, during regional/local programming time slots.

Diederich and Germany have been cited as showing that, within these notoriously well TV distribution networks, it was conventional for the national/network/central TV station to have embedded cuing signal information (i.e. corresponding to the recited **"at least one control signal"**) within transmitted national/network/central TV programming for automatically causing:

- a) The national/network/central TV programming to be **"communicated"** (i.e. retransmitted) by at least some of the local/regional stations during the national/network/central time slots; and
- b) The **"communication"** (i.e. retransmission) of the national/network/central TV programming to be inhibited by said some of the local/regional stations during the regional/local time slots. [That is, said embedded cuing information causes the local/regional programming to be communicated (i.e. transmitted) in place of the national/network/central TV programming during the regional/local time slots].

### **III. Differences:**

Claim 80 differs from the automated TV network described by Diederich and Germany only in that claim 80 requires the transmission of an additional **"instruct signal"**; i.e. in addition to the recited **"control signal"** addressed above.

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**III. Obviousness:**

The article by Chambers shows that it was well known in the art for the national/network/central TV transmitter stations of such conventional TV networks to have embedded their own national/network/central Teletext data service within the VBI of national/network/central TV programming that was provided to, and selectively communicated by, the regional/local TV stations that it served [e.g. note the last 3 lines on page 1]. This fact is evident in the following statement:

**"When regional programs are broadcast by [regional] transmitters the teletext data [embedded in the national programming] is lost unless it is decoded from the national network and regenerated as data lines for addition to the local network output"**

That is, Chambers points out that the national teletext service will not be re-transmitted by the local/regional stations when the local/regional programming is being transmitted in place of the national/network/central programming unless the national Teletext service is extracted from the received national programming and encoded into the local/regional programming during the local/regional time slots. This is clear acknowledgement of the fact that national broadcasters embedded national teletext services within the national programming transmissions that were distributed to the local affiliates and, in such cases, that the national teletext service was passed onto the households served by the local affiliate within the passed national programming.

As evidenced by the showing of Chambers, the examiner maintains that one skilled in the art would have recognized the obviousness of having distributed a national/network/central teletext service (i.e. corresponding to the recited "instruct signal") within the national/network/central TV programming of the TV distribution systems described by Diederich and Germany. The motivation for having added the national/network/central teletext service being the additional revenue that is generated by advertising contained therein; i.e. the reason any broadcaster is willing to spend the money required to provide a teletext service in the first place.

*[Here it is noted that such an embedded teletext service was inherently operative, e.g. at the receivers which were configured with teletext decoders, to cause teletext images to be locally generated thereat based on locally entered user specific page selection (i.e. NOTE: paragraph C-3 of this Office action)]*

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**R20) Claim 81 is rejected under 35 U.S.C. 103(a) as being unpatentable over Diederich (DE 2,356,966) and Germany (GB 959,274), in view of the article "CEEFAX - The Generation, Distribution and Transmission of a National Teletext Service" by Chambers, for the same reasons that were described for claim 80 above. Additionally, the following is noted:**  
(i.e. corresponding to paragraph E-33 of the Final Office action)

1) As noted above, both Diederich and Germany exemplified that it was conventional to have included cuing signals within national/network/central for automating the insertion of local/regional programming. This cuing signaling corresponds to the "second control signal" of claim 81.

2) Germany, however, also taught that it was desirable to have also included visible cuing signals within the picture portion of the network signaling for providing a visual "indicator"/"identifier" of the network breaks [note lines 53-62 on page 1]. This additional signal corresponds to the recited "information" of claim 81 when desirably added to the transmission of Diederich and Germany.

**R21) Claim 80 is rejected under 35 U.S.C. 103(a) as being unpatentable over conventional TV system configurations in view of:**

**1) The article "The Automation of Small Television Stations" by Young et al.;**

**2) The article "Microprocessor for CATV Systems" by Tunmann et al.; and**

**3) Conventional Teletext distribution and display systems as evidenced by Bart et al. [US patent #4,218,698].**

(i.e. corresponding to paragraph E-37 of the Final Office action)

The examiner's position (summarized):

The examiner maintains that the recitations of claim 80 read on a conventional TV network: in which the schedule of switching events used to control the intermediate stations is provided to the remote stations from the central/network station; and in which a conventional teletext service is carried within the network TV programming and displayed in a conventional "mixed" display mode by a conventional teletext receiver located at one of the household locations serve by the intermediate stations.

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That Young et al and Tunmann et al. evidence the fact that TV networks comprised of a centralized TV station feeding network programming to a plurality of intermediate local/regional TV stations which selectively re-broadcast the network TV programming, or their own local/regional TV programming in place of the network programming, to a plurality household TV receivers were not only notoriously well known in the art, but that it was known within such networks for the central network TV station to have transmitted program transmission schedule information to the intermediate stations to remotely control (i.e. automate) broadcast switching operations at the intermediate stations (i.e., wherein these controlled switching operations determine when the network TV programming was to be received and rebroadcast by the intermediate stations and, alternatively, when local/regional TV programming was broadcast in place of the received network programming).

That it would have been obvious for the network TV programming in the conventional TV network evidenced by Young et al and Tunmann et al. to have carried embedded an embedded national teletext service as was notoriously well known in the art, wherein such a teletext services inherently comprises sets of instructions for causing locally generated teletext images to be produced at the household receiver locations based on user specific input/request data; i.e. overlaid overlay over (i.e. displayed *in coordination with*) the TV programming as evidence by Bart et al..

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I. The state of the art:

Claim 80 recites a TV distribution network of **conventional** design. That is, **conventional** TV system configurations were known to have comprised:

- 1) An originating TV station (e.g. a **conventional** network TV station);
- 2) An intermediate TV stations (e.g. **conventional** affiliate TV stations);  
and
- 3) A plurality of ultimate receiver TV stations (e.g. **conventional** household TV receiver stations).

II. The Alleged novelty (i.e. alleged differences):

Being such, patentability of claim 80 does **not** rest on the recitations that are directed to this **conventional** TV system configuration. Rather, patentability of claim 80 rests on the recited operations that are performed within the recited conventional TV system configuration. Specifically, the patentability of claim 80 rests on alleged novelty/non-obviousness of at least one of the following recited steps/processes:

- 1) The recited step/process in which a control signal (e.g. disclosed as a signal representing a TV program transmission schedule) was "transmitted" (e.g. disclosed as being downloaded via a phone line) from the originating TV station to the intermediate stations, whereby this transmitted control signal (i.e. the TV program schedule that was down

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loaded via a phone line) controlled/automated the TV program switching/distribution operations at the intermediate station  
[i.e. that which is recited in lines 9-12 of claim 80]

and

2) The recited step/process in which the signal that is transmitted by the originating TV station of the network configuration (e.g. network TV programming) includes a video component (i.e. the video component of the network TV programming) and an instruct signal component (e.g. an instruct signal that is embedded within the VBI of the network TV programming), wherein the instruct signal component operates at least one of the ultimate receiver stations to control the generation or outputting of a locally generated video information, wherein the generation/outputting of the local video information is based on user specific data and is coordinated with the video portion of the network programming.  
[i.e. that which is recited in lines 4-8 of claim 80]

### III. Obviousness:

The examiner maintains that the two recited steps/processes are known and obviousness within the conventional TV environment for the following reasons:

1) First, within TV networks of such conventional design, it was conventional to have automated the network by "transmitting" a "control signal" from the originating/network TV station location represented TV program scheduling information to the intermediate stations, whereby this transmitted control signal was used to control the program switching/distribution operations performed by the intermediate TV stations; i.e. a fact that is evidenced in the following showings:

a) The 1971 SMPTE publication "The Automation of Small Television Stations" by Young et al. evidences such a conventional network configuration in which control signals were downloaded from the network headquarters to the intermediate stations in order to have controlled/automated the TV program switching/distribution operations at the intermediate station to reduce human error and costs;

[i.e. Lines 3-6 in the third column on page 806 of the Young et al. publication]

b) The 1978 publication "Microprocessor for CATV Systems" by Tunmann et al. evidences such a conventional TV network configuration in which TV transmission schedules were transmitted to the intermediate TV station from a remote station location via a telephone line to allow the switching schedules to be modified a remote location

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[i.e. The last 22 lines in the first column on page 72 and the first 14 lines of the second column on page 72 of the Tunmann et al. publication]

2) That, within the automated TV network environment evidenced by Young et al and Tunmann et al., it would have been obvious for the network programming to have carried an embedded teletext service, wherein this teletext service implicitly comprised various sets of "instruct signals" each of which, when selected at a receiver based on data specific to a user (i.e. a user entered teletext page number), caused the receiver to locally generate a teletext image that was known to have been displayed in "coordination with" the video portion of the TV signal in a "mixed" display mode as evidenced by Bart et al. (e.g. as is the display of subtitles, program related pages, etc,...):

A) It having been notoriously well known in the art for the network programming of such systems to have carried a network teletext service.

"When regional programmes are broadcast by transmitters [in place of national programs] the teletext data [of the national teletext service] is lost unless it is decoded from the national network and regenerated as data lines for addition to the local network output"

[i.e. The last three lines of the first page of the 1976 article "CEEFAQ – THE GENERATION, DISTRIBUTION, AND TRANSMISSION OF A NATIONAL TELETXT SERVICE" by Chambers]

B) It having been known and conventional in the teletext display art to have displayed teletext data at the household locations in a "mixed mode" as evident by Bart et al. [e.g. lines 12-37 of column 1 of US patent #4,218,698]; and



**R22) Claim 56 is rejected under 35 U.S.C. 103(a) as being unpatentable over the 1980 article entitled “Telesoftware-Value Added Teletext” by Hedger et al. in view of:**

**1) The 1980 article “The Use of MicroCobol for Telesoftware” by Sedman; and**

**2) Either one of Yoshino et al. [GB 1,405,141] or Bart et al. [US #4,213,698].**

(i.e. corresponding to paragraph E-11 of the Final Office action)

**I. The claimed invention (as disclosed):**

Claim 56 appears to be directed to the “WALL STREET WEEK” application of applicants’ instant 1987 written description in which the receiver station, under software control, operates:

- 1) To receive user specific information pertaining to the user’s stock portfolio;
- 2) Contact a remote data source to obtain the latest stock prices for the stocks of the user’s stock portfolio;
- 3) Utilizes the stock portfolio information and the obtained stock prices to locally generate an image representing the performance of the portfolio; and
- 4) To simultaneously display the locally generated image on a TV receiver with video information of a received TV program.

Significantly, claim 56 does not recite that the locally generated image is related to the TV programming nor does it recite that the locally generated image is displayed at the respective stations in “common” synchronism with the TV programming.

**II. The showing of Hedger et al.:**

As is shown in figure 1 on page 557, Hedger et al. discloses a TV receiver which includes a computer (e.g. the illustrated “microcomputer”) for receiving and running downloaded computer software (e.g. “Telesoftware”). Hedger et al. recognized that the “Telesoftware” could be downloaded to the TV receiver using conventional videotex data transmission: i.e. using dial-up networks (e.g. viewdata); or using TV broadcast networks (e.g. teletext). As to specific

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applications for this downloaded telesoftware, Hedger et al. describes an embodiment in which the downloaded "Telesoftware" causes the computer implemented TV receiver to:

- 1) Receive user specific stock portfolio information from a local data source (e.g. a cassette recorder);
- 2) To utilize received user specific stock portfolio information, after the step of receiving, to access broadcasted teletext pages to obtain remotely originated data representing the latest stock prices; and
- 3) To use the user specific stock portfolio information and the obtained remotely originated data to calculate, via the execution of the downloaded "Telesoftware", the rise (or fall) in the value of the user's portfolio which is, inherently, displayed to the user via the TV receiver in the form of a locally generated image.

**"Alternatively, by making the details of his shares portfolio known to the telesoftware program (possibly by loading it from a cassette recorder) the viewer could then use the program to access the stock market pages of teletext and compute the rise (or fall) in the value of the portfolio".**

[Lines 11-20 in the second column on page 564 of the Hedger et al. publication]

### III. Differences:

The examiner maintains that claim 56 differs from the showing of Hedger et al. only in that claim 56:

- 1) Requires that a remote data source be "contacted" to obtain the remotely originated data (i.e. the latest stock prices); and
- 2) Requires that the locally generated image be displayed simultaneously with the video component of a received TV signal.

### IV. State of the art:

"Videotex" was known to have comprised two distinct types of systems: One-way teletext systems; and two-way viewdata systems.

**"Videotex has two distinct forms of information transmission – Teletext and Viewdata. Teletext is the transmission of textual data and graphics to a consumer adapted television set using broadcast**

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transmission techniques. Viewdata is the interconnection of a home terminal device to a host computer via narrow band transmission facilities, such as a telephone line.

Although Teletext and Viewdata display information on a consumer TV screen in similar fashion, they have managed to evolve separately. Each of the two techniques has its own advantages and disadvantages.

In Teletext, data is sent as a recirculating data stream. The amount of data stream is limited only by the number of transmission scan lines available for data transmission and the predetermined acceptable latency between page selection and display. Viewdata provides almost instant access to a large number of display pages with minimum access time. However, because it is similar to a timesharing service, telecommunication and computer port requirements have high associated cost burdens."

[Pages 14 and 15 of the article "Videotex Services via CATV – Hybrid Systems Approach" by Dages]

#### **V. Obviousness:**

1) Wherein, within the application described by Hedger et al., the one-way teletext form of Videotex was utilized to obtain the latest stock prices from a remote teletext data source, Sedman explicitly evidenced that obtaining the latest stock prices from a remote viewdata data source, utilizing the two-way viewdata form of Videotex, was a known and recognized alternative way of obtaining said information.

"Much of the data that is already on Prestel would be of greater value if it were possible to perform calculations directly on it. For example, it would be possible to calculate the current value of a portfolio of shares by accessing the stock exchange prices of each".

[Lines 18-22 on page 406 of Sedman]

Being such, it would have been obvious to one of ordinary skill in the art to have modified the application disclosed by Hedger et al. to obtain the stock prices required therein by "contacting" a remote viewdata source, instead of from broadcasted teletext pages; i.e., again, being that:

a) Sedman evidenced viewdata to have been a known and obvious alternative for this specific application (i.e., for looking up stock prices); and

b) That "teletext" and "viewdata" were known and recognized by those of ordinary skill in the art as having been different alternative forms of "Videotext."

2) Bart et al. and Yoshino et al. each evidence it was known to have been advantageous and desirable to display computer generated data on a TV receiver as an overlay/inset to the displayed video component of received TV

programming thereby allowing the viewer to continue to view TV programming while displaying the output from the computer; i.e. thereby advantageously avoiding the need to interrupt the viewing of the TV programming when viewing outputs from the computer [SEE: Lines 1-27 of column 1 and lines 54-65 of column 10 in Bart et al.; or Lines 68-80 and 110-113 on page 4 of Yoshino et al.]

Thus, wherein Hedger et al. does not describe the way in which the "microcomputer" of figure 3 was to have displayed its calculations on the TV set, having displayed the calculation as an overlay/inset to received TV programming would have been obvious in light of the teachings of either Bart et al. or Yoshino et al. and the recognized advantages associated therewith..

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### Arguments:

1) With respect to the arguments that appear in the first full paragraph on page 42 of the Brief, it is agreed that Hedger explicitly recognized a well known advantage on one-way videotext systems (i.e., they are cheap and safe). This explicit recognition does not, however, teach away from a two-way videotext configuration as is suggested by applicant being the two-way videotext systems have their own well known advantages (i.e., they are fast and offer access to a much larger databases). The following is noted:

- a) Hedger does not teach away from the combination; and
- b) The desire to serve more terminals and at a quicker rate, are both well known reasons for selecting a two-way videotext configuration over a one-way configuration (i.e. motivation for the modification).

2) With respect to the arguments that begin on page 43 of the Brief, the examiner notes that the mixed display mode of the prior art (e.g. of Bart and Yoshino) was recognized to have been desirable feature in the TV art in that it permitted the display of additional computer type character/graphics information, e.g. videotext, on a conventional TV screen without causing interruption to the display of normal TV programming. Such would be a desirable feature to have added to the modified system of Hedger.

3) In the first full paragraph on page 44 of the Brief, applicant demands that patentable weight be given to the "locally generated" image

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terminology but one again applicant fails to specifically point out what that patentable weight should be [SEE: paragraph "R1" of this action]. What exactly is applicant's alleged definition of a "locally generated image" that causes the recited terminology to be exclusive of locally generated videotext images "*WHEN PROPERLY CONSTRUED*"?

**R23) Claims 57,58, 60-63, 65, 66, 73 and 89-91 are rejected under 35 U.S.C. 103(a) as being unpatentable over: The 1980 article entitled "Telesoftware-Value Added Teletext" by Hedger et al. in view of:**

**1) The 1980 article "The Use of MicroCobol for Telesoftware" by Sedman; and**

**2) Either one of Yoshino et al. [GB 1,405,141] or Bart et al. [US #4,213,698],**

**for the same reason that was set forth for claim 56 above. The following is noted:**

(i.e. corresponding to paragraph E-12 of the Final Office action)

1) With respect to claim 57, it is noted that the microcomputer of Hedger et al. is programming via downloaded "Telesoftware";

2) With respect to claim 58, it is noted that some type of instruction must be given to the microcomputer of Hedger et al. to cause the downloaded "Telesoftware" to be executed to calculate the value of the portfolio; i.e. certainly the calculation is not performed randomly at some arbitrary time.

3) With respect to claims 60-62, it is noted that the receiver must receive and process many types of identifiers in order to perform the described operations, such as: identifiers identifying the types of stocks owned in the portfolio; a TV channel selection identifier for causing the tuner of the TV receiver to select the TV programming that is to be viewed; page and packet identifiers for identifying the data transmitted to the receiver from the remote source, etc,...

4) With respect to claim 63, it is noted that Videotex data is necessarily conveyed via a digital channel.

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5) With respect to claims 65 and 66, it is noted that the downloaded "Telesoftware" in Hedger et al. inherently comprised discrete signals which had to be received and organized by the microcomputer prior to execution thereof;

6) With respect to claim 73, it would have been obvious for the TV programming that is displayed on the TV receiver in Hedger et al. to have been from a conventional subscription-type TV signal source requiring decryption.

**R24) Claim 93 is rejected under 35 U.S.C. 103(a) as being unpatentable over the 1980 article entitled "Telesoftware-Value Added Teletext" by Hedger et al. in view of:**

**1) The 1980 article "The Use of MicroCobol for Telesoftware" by Sedman; and**

**2) Either one of Yoshino et al. [GB 1,405,141] or Bart et al. [US #4,213,698],**

**for the same reason that was set forth for claims 57,58, 60-63, 65, 66, 73, and 89-91 above. The following is noted:**

(i.e. corresponding to paragraph E-13 of the Final Office action)

1) Again, the examiner notes that the "Telesoftware" described in Hedger et al. inherently comprised various types of "discrete signals" which had to be "organized" at the receiver to obtain a complete set of instructions (i.e. the complete computer program) which could be run by the computer of the receiver. For example, the "Telesoftware" in Hedger et al. was conveyed using the "discrete" packet structure of standard Videotex; i.e. **SEE:**

a) Lines 2-8 and 26-33 in the first column on page 561 of Hedger et al.;

b) Lines 1-6 in the first column on page 562 of Hedger et al.;

c) The discussion under the headings "THE TELESOFTWARE RECEIVER" and "THE PROGRAMS" which appear/begin on page 562 of Hedger et al.; and

d) Paragraphs "C-1", "C-2" and "C-3" of the Final Office action mailed 4/28/2004.

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Given the above, when receiving the described "Telesoftware," the receiver of Hedger et al. necessarily included:

- a) Receiving circuitry (e.g. an antenna and/or tuner) for receiving a transmission containing the Videotex page or pages which represented the desired "Telesoftware", wherein the "page" or "pages" comprised pluralities of "discrete Videotex packet signal";
- b) Separating circuitry (e.g. slicing circuitry) for detecting and separating the discrete Videotex packet signals from the received transmission;
- c) Selection circuitry for detecting and passing those discrete Videotex packet signal which comprise the Videotex page/pages that carry the desired "Telesoftware";
- d) The "computer" which, utilizing its "resident control program" (see page 562 of Hedger et al.), organized the separated discrete packets of video information into an "organized" computer program that can be run/executed by said computer.

2) Any time locally generated image data is overlaid/inset into a displayed video signal, the timing of output/display was necessarily "coordinated" with the raster scanning of the displayed video signal; i.e. the output of the locally generated image must be locked to the timing of the horizontal and vertical display frequency of the video. For if the image was not locked to the frequency of the video, the overlaid/inset image data would have rolled "rolled" at a rate proportional to the differences in the respective scanning frequencies.

Here it is noted the horizontal and vertical sync signals of the received video signal inherently constitute timing "control signals" which drive the raster scan circuitry of the TV display device and to which the locally generated overlay/inset data must necessarily be "locked" thereby producing a the "coordinated" multimedia presentation.

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### Arguments:

1) The examiner notes that in rejecting claim 93, the prior art is combined in the manner set forth for claim 56 above. Motivation for the combination has been addressed above.

2) With respect to the assertions on page 48, it is noted that claim 93 only requires the respective images to be displayed in a "coordinated" fashion.

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Locking their vertical and horizontal scanning phase and frequency together, as was known to be required/"essential" to produce a stable picture whenever one video image is overlaid on another, results in a "coordinated" display: i.e., a display in which the display timing of one image is locked to (i.e. "coordinated" with) the display timing of the other (i.e. known in the art as "genlock"). As with other terms of the claims, the examiner maintains that applicant is simply reading too much into the "coordinated" display terminology.

3) With respect to the further assertions on page 48 it is noted that Yoshino does in fact show that the generation of the locally generated image is added to the video images of the received video signal in a "coordinated" fashion by the fact that display circuit 8 of figure 1 is locked (@ 47 and 47) to the horizontal and vertical scanning rate of the receiver video. Such is locking/coordination of display timing is necessary/"essential" and therefore implicit in the showing of Bart et al. too.

**R25) Claims 94, 95, 98, 100, 102, 103, 106-109, and 187-197 are rejected under 35 U.S.C. 103(a) as being unpatentable over: The 1980 article entitled "Telesoftware-Value Added Teletext" by Hedger et al. in view of:**

**1) The 1980 article "The Use of MicroCobol for Telesoftware" by Sedman; and**

**2) Either one of Yoshino et al. [GB 1,405,141] or Bart et al. [US #4,213,698],**

**for the same reason that was set forth for claim 93 above.**

(i.e. corresponding to paragraph E-14 of the Final Office action)



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**R-26) Claims 73 is rejected under 35 U.S.C. 103(a) as being unpatentable over Oono et al. [JP 55-028691], for the reason that were set forth for claim 56 in below paragraph R31, in view of Zworykin [US #2,757,226].**

(i.e. corresponding to paragraph E-10 of the Final Office action)

Claim 73 differs from the showing of Oono et al. only in that Oono et al. did not describe the TV programming as having been scrambled.

Zworykin has been cited to evidence the fact that it was notoriously well known in the TV distribution arts to have scrambled certain TV signals so to have prevented unauthorized reception by unauthorized viewers (i.e. those who have not paid for the programming).

It would have been obvious to one of ordinary skill in the art to have utilized the conventional TV distribution network described in Oono et al to have distributed conventional TV programming on a subscription basis given the fact that advertising revenues were not always adequate to pay for the cost of the TV programming [e.g. see lines 21-31 of column 1 in Zworykin]. In such situations it was known to have been desirable, if not necessary, to have scrambled the TV programming to prevent unauthorized use/reception by people who have not subscribed [e.g. lines 15-68 of column 1 in Zworykin ].

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## **VII. SECTION 102 ISSUES:**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**R27) Claims 187 is rejected under 35 U.S.C. 102(b) as being anticipated by Oono et al. [JP 55-028691].**

(i.e. corresponding to paragraph E-4 of the Final Office action)

**A) Preface:**

Together, Teletext and Viewdata make up Videotex, wherein:

1) Teletext systems represent a one-way version of videotex in which:

a) The entire teletext database is cyclically transmitted within the TV channels; and

b) The receivers operate to search, select, and display that portion (i.e. those pages) of the cyclically transmitted teletext database that are desired by the user. Teletext systems are advantageous in that they utilize existing wideband video/TV channels as their transmission path, and are disadvantageous in that much of the available bandwidth is necessarily wasted transmitted undesired portions of the database.

2) In contrast, Viewdata distribution systems represent a two-way/interactive version of videotex in which:

a) The entire Viewdata database is stored at a central server location; and

b) Via a telephone line, the user contacts the remote server, requests desired portions/page of videotext data, and receives the requested portion/pages from the remote server. Viewdata systems are advantageous in that none of the available bandwidth is wasted on the transmission of undesired data, and are disadvantageous in that they utilize expensive narrow band phone lines as their transmission path.

Given the known advantages and disadvantages of conventional teletext and viewdata systems, those of ordinary skill in the art at the time of applicants' alleged invention were developing *optimized* hybrid teletext/viewdata systems which imported the advantages of both teletext and viewdata systems.

**"Videotex has two distinct forms of information transmission – Teletext and Viewdata. Teletext is the transmission of textual data and graphics to a consumer adapted television set using broadcast transmission techniques. Viewdata is the interconnection of a home terminal device to a host computer via narrow band transmission facilities, such as a telephone line.**

**Although Teletext and Viewdata display information on a consumer TV screen in similar fashion, they have managed to evolve separately. Each of the two techniques has its own advantages and disadvantages.**

**In Teletext, data is sent as a recirculating data stream. The amount of data stream is limited only by the number of transmission scan lines available for data transmission and the predetermined acceptable latency between page selection and display. Viewdata provides almost instant access to a large number of display pages with minimum access time. However, because it is similar to a timesharing service, telecommunication and computer port requirements have high associated cost burdens.**

**A new system architecture is evolving known as the hybrid configuration. In this system, the advantages of both Teletext and Viewdata can be combined to provide an optimal service."**

[Pages 14 and 15 of the article "Videotex Services via CATV – Hybrid Systems Approach" by Dages]

**B) The showing of Oono et al.:**

Oono et al. inherently represents an example of such *optimized* "hybrid" teletext/viewdata system. Namely, the system disclosed by Oono et al.:

- 1) Corresponds to a two-way Viewdata system in that it utilizes a telephone modem (@ 10 of figure 3) which enabled the user to submit requests to a remote server for videotext data that he/she desired; and
- 2) Corresponds to a one-way Teletext system in that it utilized the VBI of broadcasted TV signals (@ "d" of figure 3) to transport packets of videotex data containing the requested portions/pages of data to the receiver stations.

**C) With respect to the limitations of claim 187 (The Grounds of Rejection):**

As discussed above, Oono et al. discloses a *hybrid* videotex system. As shown in figure 3, each receiver station of the Oono et al. system was computer driven and included a switch which permitted the receiver station, under user control, to be selectively operated in any one of three available display modes:

- 1) A **video display mode** which the received TV video image is displayed alone (e.g. occurs when signal V3 is selected via button 16 of the remote control unit 9 of figure 4);
- 2) A **text mode** in which the locally produced teletext image is displayed alone (e.g. occurs when signal V1 is selected via button 14 of the remote control unit 9 of figure 4); and

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3) A ***mixed mode*** in which the display of the locally generated teletext image is coordinated with the display of the video image to produce a combined image (e.g. occurs when signal V2 is selected via button 16 of the remote control unit 9 of figure 4).<sup>9</sup>

The result being that the system outputs an audiovisual presentation that comprises over time the video, the text, and the mixed video and text outputs of the three available display modes. This Oono et al. system comprised:

1) TV receiving circuitry (1) ***for receiving*** an information transmission comprised of a TV signal and a plurality of (i.e. "first", "second", "third", etc,...) discrete videotex packet signals embedded within the VBI of the TV signal (as is illustrated in figure 1);

2) A separating circuit (2) ***for detecting***, separating, and decoding the pluralities of discrete videotex packet signals that are embedded in VBI the TV signal of the received information signal;

3) A conductor ***for passing*** each of the detected/separated/decoded discrete videotex packet signals to at least one microprocessor-based processor (e.g. @ 3) whereby those of the discrete packets that are addressed to the terminal, i.e. as determined by comparing the address data of each packet to the terminal's own locally stored address, are the "interpreted";

4) Circuitry, including RAM (4), ***for organizing*** the interpreted information obtained from the plurality of the passed discrete videotex packet signals (e.g. first, second, third, etc,...) into a videotex image for display;<sup>10</sup>

5) A user input device (9) ***for supplying*** various forms of inputted ***user specific datum*** to said processor (@ 3) for processing therein; wherein, to be processed by said processor, said supplied information ***must first be entered and "stored"***, i.e. at least temporarily, within said processor. When this user specific datum represents requests for a displayable

<sup>9</sup> Teachings of this same multi-mode display feature can be found throughout the art of record [Note: lines 12-55 in column 1 of Bart et al.; lines 29-44 on page 2 of GB #1,486,424 to Turner; JP 54-154215 to Yokoyama; Switch 3 in figure 4 of U.S. Patent #3,961,137 to Hutt et al.; etc,...]

<sup>10</sup> This is an implicit feature of videotex transmission (note paragraphs "C-2" and "C-3" of the Final Office action mailed 4/28/2004 Office action). That is, as was well known in the videotex art, the limited bandwidth of a horizontal line in the VBI of TV signal meant that even the shortest of videotex messages had to be conveyed as a multiple of videotex data packets embedded, respectively, in a multiple of said horizontal line intervals. Such is implicitly true of the videotex data that is conveyed in Oono et al. too (e.g. be it the software data, the refresh data, or the superimposed data).

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videotext image, said supplied user specific datum must be entered, stored, and processed by the processor (3) **"prior to"** the receipt, "organization", and display of the requested videotext data pertaining thereto [i.e. the videotex image must be requested by the user before the data corresponding to said requested page can be received and organized for display];

6) Circuitry (@ 3, 4) **for generating** the videotext image by processing the stored user specific subscriber datum that is "based on"/"by processing" the information entered by the user via input device (9); and

7) Display circuitry (not shown), including a switch (5), for producing a presentation comprised of a video image (@ V3), a □videotext image (@ V1); and a combined □videotext/video image (@ V2).

*[Here it is noted that any time □videotext data was superimposed/overlaid over the video component of a received TV signal, it was necessarily done so in a synchronized (i.e. "coordinated") fashion. If this were not the case, differences in horizontal and vertical display frequencies would cause the □videotext images to "roll" on the display screen whereas differences in horizontal and vertical display phase would cause the videotext images to be displayed with an arbitrary phase. In Oono et al., the fact the □videotext images are displayed in such a "coordinated" fashion is expressly indicated by the fact that the "H" and "V" sync signal are being provided to display RAM 4 of figure 3].*

.....

### Arguments:

1) On page 30 of the Brief, the applicant argues that the "user specific terminology" should be interpreted to mean datum that:

- a) Relates to a particular subscriber's receiver station; or
- b) Relates to the user or users of that receiver station.

The examiner maintains that inputted "datum" representing requests for information clearly "relate to the user."

2) On page 30 of the Brief, the applicant argues that Oono et al does not describe the processing of inputted keyboard datum, via processor (3), for causing the generation of the presentations thereat. The fact that the user controls the terminal via inputs to the processor (3) supplied via keyboard (9) refutes this position.

3) In line 1 on page 31 of the Brief, the applicant argues that the recited "organize" terminology means "to arrange in a desired pattern." The examiner maintains that the information that is received must be decode, interpreted, and "organized" into the displayable "page"/image" format that

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is sorted in RAM (4). It is simply implicit in the function/operation of all videotext decoders; i.e. Oono et al being no different.

**R-28) Claims 188, 189, 191, 192, 193, 194, 195, 196, and 197 are rejected under 35 U.S.C. 102(b) as being anticipated by Oono et al. [JP 55-028691] for the same reason that were set forth for claim 187 above. Additionally, the following is noted:**

(i.e. corresponding to paragraph E-5 of the Final Office action)

1) With respect to claims 188 and 189, it is noted that the recited "third discrete signal" has not been related back to the "information transmission" and therefore broadly reads on the TV channel selecting device in Oono et al. (e.g. 9 of figure 4) which generate discrete channel selection signals for selecting the TV presentation that is to be received/presented.

2) With respect to claims 191 and 192, it is noted that the recited "user specific subscriber datum" broadly reads on each receiver's terminal address which is both stored locally within the receiver and broadcasted within the packets that are obtained from the remote source; i.e. when the address data of a received packet is equal to the terminal's stored address (via comparison) the receiver knows that the packet has been transmitted to it.

3) With respect to claim 193, it is noted that the recited "third discrete signal" can be read on "software" that drives CPU (@ 9) and that the "receiver specific control signal" reads on the channel selection signals provided by input device (@ 9).

4) With respect to claim 194, it is noted that the recited "third discrete signal" can be read on "software" that drives CPU (@ 9) and that the "receiver specific control signal" reads on the videotex page selection signals provided by input device (@ 9).

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**R-29) Claim 93 is rejected under 35 U.S.C. 102(b) as being anticipated by Oono et al. [JP 55-028691] for the same reason that were set forth for claim 187 above.**

(i.e. corresponding to paragraph E-6 of the Final Office action)

Arguments:

1) On page 33 of the Brief, applicant suggest that the limitations of claim 93 differ significantly from the limitations of claim 187 and, therefor, suggests that the examiner has not adequately set forth how the limitations of claim 93 are met by Oono et al. Specifically, the applicant argues that, in claim 93, the "step of outputting, as opposed to the step of generating, is based on the organized signal." The examiner notes the following:

a) In Oono et al. the image that is generated/displayed at the receiver is generated via the "organized" display data that is stored within RAM (3). This organized data, and hence the resulting generation of the image, result from the processing of "said user specific datum" as addressed with respect to the rejection of claim 187.

The limitations of claim 93 are broad and require nothing more.

**R-30) Claims 94, 95, 100, 102, 103, and 106-109 are rejected under 35 U.S.C. 102(b) as being anticipated by Oono et al. [JP 55-028691] for the same reason that were set forth for claim 93 above. With respect to the specific recitations contained therein, see paragraph "R28" of this Office action.**

(i.e. corresponding to paragraph E-7 of the Final Office action)



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**R31) Claim 56 is rejected under 35 U.S.C. 102(b) as being anticipated by Oono et al. [JP 55-028691] for the same reason that were set forth for claim 187 above; e.g.**

(i.e. corresponding to paragraph E-8 of the Final Office action)

In Oono et al.:

- a) The CPU (@ 3 of figure 3) received user specific data from the input device (@ 9) representing user specific inputs;
- b) The CPU (@ 3 of figure 3) then contacted a remote data source via the telephone modem (@ 10) when the user specific data represented a request for videotext information;
- c) The receiver (@ figure 3) then receives a broadcasted TV signal ("d") and separates (@ 2) the discrete packets of videotex data (@ figures 1 and 2) embedded therein, wherein portions of these received packets contain the videotext data which will serve "as a basis" for "generating" the videotex portion of a combined image presentation whenever switch (5) is configured to select the "mixed" image display mode (i.e. to select signal "V2" via the actuation of a button by the user of a button (15 of figure 4) on the user input device (@ figure 4));
- d) The CPU (@ 3 of figure 3) which, by executing control software therein, processes the received videotex data and the user entered information to cause the "local generation" of a videotext image which is stored in a local memory (@ 4 of figure 3); and
- e) Outputting circuitry (e.g @ 7 and 5 of figure 3) for providing a combined and "coordinated" videotex/TV display presentation whenever the "mixed" display mode signal (V2) has been selected for output via the actuation of button (15) of input device (9).

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Arguments:

- 1) On page 34 of the Brief, applicant alleges that the examiner failed to explain where Oono et al teaches the execution of "processor instructions" to process remotely originated data and user specific data to generates and image. Clearly, the processor (3) in Oono et al. is a CPU and therefor, by definition, operates under control of "processor instruction"/software. The processing that is described in Oono et al. includes the generation of user selected audiovisual presentations via the processing (@ 3) of inputted "user specific" data (e.g. requests) and the

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processing (@ 3) of selected ones of the videotext packet signals (i.e. figure 1) that are passed to the processor from separating element (2).

2) With respect to the arguments set forth on page 34 of the Brief, the examiner notes that the recitations are simply broader than the scope that is being argued. Specifically, lines 10-11 only required the execution of processor instruction to process the remotely originated data and the user specific data in order to locally generate the image. More specifically, there is nothing in this recitation that requires the processing of the remotely originated data and the user specific data to occur simultaneously and/or together: i.e. the limitation is broad enough to read on processing that occurs sequentially in time provide that the result of the processing is a locally generated image. In Oono et al., the processor (@ 3) processed the user inputs and the received data sequentially in time to locally generate image/images that, when the mixed display mode is selected, is overlaid onto the received video in a synchronized/coordinated fashion.

Further, despite applicant's argument, it is clear that at least some of the audiovisual presentation are requested from the headend via inputs from user. If this were not the case, then there would be no use for the Modem (@ 10) and the "address data" of the headers ("D" of figure 2); e.g. the lack of explicit disclosure does not necessarily mean that a teaching is absent.

**R32) Claims 57, 58, 60-63, 65, 66, 67-72, and 74 are rejected under 35 U.S.C. 102(b) as being anticipated by Oono et al. [JP 55-028691] for the same reason that were set forth for claim 56 above. Additionally, the following is noted:**

(i.e. corresponding to paragraph E-9 of the Final Office action)

1) With respect to the recitations of claim 57, it is noted that CPU (3) is a software driven device and therefor must be programmed with the software that drives it;

2) With respect to the recitations of claims 58 and 71, it is noted: that CPU (3) is a software driven device and therefor must be programmed with the software that drives it; and that the videotex data inherently comprised various "instruct signals" which caused the CPU (3) to execute the specific portions of the software pertaining to the generation/display of the videotext data contained

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therein [e.g. Note section "C" of the Final Office action and, more specifically, paragraph "C-3" contained therein];

3) With respect to the recitations of claims 60-62, it is noted that the videotex packets and videotex data that are received and processed by the receivers themselves contain host of different "identifiers" that must be processed by the receiver/CPU [e.g. terminal identifiers, page identifiers, data type identifiers, etc,... (note figure 2)];

4) With respect to the recitations of claim 63, it is noted that the videotex channel represents an explicit first digital channel, and that the telephone modem/channel represents an implicit second digital channel for providing two-way /interactive communications between the receivers and the remote TV/Videotex transmitting cite.

5) With respect to the recitations of claims 65 and 66, it is noted that the recited processing/organizing of first and second discrete signals: reads on the processing of videotext data packets (see paragraph "C-2" of the Final Office action); and/or reads on the processing of software by CPU (3) which software is itself, inherently, made up of discrete signals/words/instructions which must be organized and executed.

6) The examiner notes that the recitations of claim 67-72 are met when the "television program" terminology is broadly read in accordance with the instant 1987 CIP specification's definition of "programming" so as to encompass videotex-type "programs" too.

7) With respect to the recitations of claim 74, it is noted that input device (@ 9 of figures 3 and 4) inputs many instructions/commands that must be processed by the software driven CPU (@ 3).

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**VII. Double Patenting:**

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

**R33) Claims 56-58, 60-63, 65-74, 89-91, 93-95, 98, 100, 102 and 187-197 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 9-13 of U.S. Patent No. #4,694,490. Although the conflicting claims are not identical, they are not patentably distinct from each for the following reasons:**

(i.e. corresponding to paragraph E-43 of the Final Office action)

1) Applicants continues to allege (i.e. admit) that claims **56-58, 60-63, 65-74, 89-91, 93-95, 98, 100, 102 and 187-197** of the instant application are directed to 1981 subject matter disclosed in the 1981 parent specification and are therefore, so it is alleged, entitled to the 1981 filing date of said parent application;

2) Assuming applicants' allegation is true, it becomes apparent that claims **56-58, 60-63, 65-74, 89-91, 93-95, 98, 100, 102 and 187-197** of the instant application and claims **9-13** of US Patent #4,694,490 are necessarily be directed to the same 1981 "Wall Street Week" embodiment of the 1981 specification in which locally generated images were overlaid onto received video [Note that this fact now seems to be acknowledged in the Brief (e.g. pages 4-9)]. The description of this 1981 "Wall Street Week Embodiment" is, however, quite limited [e.g. NOTE: That which is described, for example, in lines 5-68 of column 19 and lines 1-7 of column 20 of US Patent #4,694,490; and APPENDIX I attached to the Final Office action];

3) Claims **9-13** of US Patent #4,694,490 are written in *means-plus-function* format and therefor are assumed to invoke a section 112-6 claim interpretation. That is, each of the recited "means" of claims 9-13 is presumed to be limited specifically to the structure described in the 1981 specification as having performed the recited function and equivalents thereof.

4) When the "means" of claims **9-13** of US Patent #4,694,490 are interpreted according to 112-6 based on the 1981 specification, it seems apparent that the "means" of these claims encompass all of the disclosed receiver side structure and processing thereof (and equivalents thereof); i.e. given the limited description of 1981 "Wall Street Week" embodiment that is provided by the 1981 specification. That is, referring to figure 6C of the 4,694,490 Patent, note that claims 9-12 of said patent include the following recitations:

a) "Mean for demodulating" the output of a carrier transmission receiving means to detect a video program signal;

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- b) "Decoder means for determining" the presence/absence of an instruct-to-overlay signal;
- c) "Computer means for generating and transmitting" overlay signals;
- d) "Means connected to said computer means and responsive to said decoder means ... for coupling said overlay signals" to the TV receiver;
- e) "Means connected to said computer means for selectively updating said overlay signals".

5) Being that the recitations of claims **56-58, 60-63, 65-74, 89-91, 93-95, 98, 100, 102 and 187-197** of the instant application must necessarily find support from these same limited 1981 descriptions, i.e. given applicants' claim to the 1981 filing date, it is apparent that claims **56-58, 60-63, 65-74, 89-91, 93-95, 98, 100, 102 and 187-197** the instant application are not patently distinct from the "means" recited in claims **9-13** of US Patent #4,694,490 given the above. That is, while claims **56-58, 60-63, 65-74, 89-91, 93-95, 98, 100, 102 and 187-197** of the instant application positively recite steps which are not explicitly recited in claims **9-13** of US Patent #4,694,490, these recited steps are a necessary part of the recited functions of the "means" of the patented claims.

This position is supported by the fact that, in responding to the section 120 priority issue, applicants often argue that recitations of the instant claims find *explicit* support in the 1987 specification and *implicit* support in the 1981 parent specification (i.e. that the processing that is described in the 1981 parent specification implicitly comprised ones of the currently recited steps). Obviously, to the extent that the claims 9-13 recite this same described 1981 processing, the recitations also include the same alleged implicit steps.

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**(10) Related Proceeding(s) Appendix**

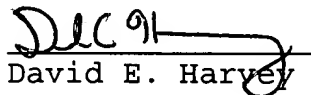
No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

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For the above reasons, it is believed that the rejections should be sustained.

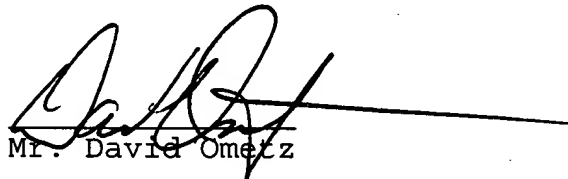
Respectfully submitted,

  
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**Supervisory Patent Examiner**  
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